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Hiroaki Dei

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EXAMINER

PHAM, TIMOTHY X

ART UNIT

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2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,777	Applicant(s) DEI, HIROAKI	
	Examiner TIMOTHY PHAM	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 62-74, 80-102 and 108-110 is/are pending in the application.
- 4a) Of the above claim(s) 75-79 and 103-107 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 62-74, 80-102 and 108-110 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election group I without traverse of claims 62-74, 80-102, and 108-110 in the reply filed on April 15, 2009 is acknowledged.

The requirement is still deemed proper and is therefore made FINAL.

Claims 75-79, and 103-107 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claims. Election was made without traverse in the reply filed on April 15, 2009. Claims 111-119 drawn to the computer program are canceled as in preliminary amendment filed on 01/04/2006.

Claim Objections

2. Claims 63-74, 83-88, 92-102, and 110 are objected to because of the following informalities: the term "An image data communication" should be replaced with – The image data communication --. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 62-65, 69-74, 80-93, 97-102, and 108-110 are rejected under 35 U.S.C. 102(b) as being anticipated by Campana, Jr. (hereinafter "Campana"; US Patent No. 5,710,798).

Art Unit: 2617

Regarding claims 62, 80-82, 89-91, and 108-109, Campana discloses an image data communication system, an image data distribution device, an image data reception device, and an image data communication method comprising:

an image data distribution device for sequentially distributing a plurality of sets of identical moving picture image data with prescribed time differences (Abstract; col. 24, lines 6-16, 48-51; col. 25, lines 10-15, e.g., the first and second encoded information streams modulate cycles of the subcarrier to produce first and second parallel information streams which are time offset by the time delay interval); and

an image data reception device (Fig. 11, reference 104) for receiving moving picture image data that are distributed from said image data distribution device while moving among a plurality of radio areas (col. 48, lines 19-48; col. 58, lines 12-34); wherein:

said image data reception device, at a time of handover that occurs when moving from a current radio area to another neighboring radio area (col. 19, lines 55-63, col. 43, lines 25-26, e.g., roaming operation), receives over a prescribed interval said plurality of sets of identical moving picture image data having prescribed time differences that are distributed from said image data distribution device and selects necessary data from the received moving picture image data to reconstruct one set of moving picture image data (col. 22, lines 46-53, e.g., the receiver reconstructs the original signal by using a diversity combiner which sums the outputs of signals delays corresponding to the signal delays used at the transmitter); and

said image data distribution device, during only said prescribed interval, performs priority control such that said plurality of sets of identical moving picture image data having prescribed time differences are received together in said image data reception device (col. 44,

Art Unit: 2617

lines 1-10, 25-40; col. 48, lines 57-59; col. 56, lines 24-28; col. 61, lines 42-49; col. 64, lines 22-26; col. 65, lines 20-27, e.g., This is to permit the receiver or transceiver to look into its stored memory U8' to determine and to be able to calculate the time offset of the first and second parallel information streams to reconstruct missing faded portions of the message caused by atmospheric dropouts, interferences or other types of fades causing faded information parallel in one or the other of the parallel information streams).

Regarding claims 63 and 110, Campana discloses the image data communication system and the image data communication method according to claims 62 and 91 respectively above, wherein said plurality of sets of identical moving picture image data are a plurality of sets of encoded image data in which identical image data have been encoded by the same encoding method (Fig. 8; Fig. 11, reference 113; col. 48, lines 62-67, e.g., The FIRST and SECOND MESSAGES modulate cycles of an analog or digital subcarrier by an analog or digital subcarrier modulator (protocol encoder) 113 to produce the parallel first and second message or information streams with identical information or information units separated by the TIME DELAY INTERVAL time OFFSET as discussed above in conjunction with FIG. 8).

Regarding claims 64 and 92, Campana discloses the image data communication system and the image data communication method according to claims 63 and 91 respectively above, wherein: said image data distribution device includes:

encoded image data transmission means for both sequentially transmitting on a transmission line said plurality of sets of identical encoded image data with prescribed time differences in at least said prescribed interval and, during this transmission, conferring to each of said plurality of sets of identical encoded image data information that is necessary for said

Art Unit: 2617

reconstruction (col. 44, lines 1-10, 25-40; col. 48, lines 57-59; col. 56, lines 24-28; col. 61, lines 42-49; col. 64, lines 22-26); and

said image data reception device includes:

encoded image data reception means for receiving said plurality of sets of identical encoded image data having said prescribed time differences by way of said transmission line from said encoded image data transmission means (col. 22, lines 46-53, e.g., the receiver reconstructs the original signal by using a diversity combiner which sums the outputs of signals delays corresponding to the signal delays used at the transmitter); and

reconstruction means for referring to information necessary for said reconstruction that has been conferred to the encoded image data to reconstruct, as one set of encoded image data, said plurality of sets of identical encoded image data having said prescribed time differences that have been received in said encoded image data reception means (col. 22, lines 46-53; col. 37, lines 23-28).

Regarding claims 65 and 93, Campana discloses the image data communication system and the image data communication method according to claims 64 and 91 above, wherein:

said image data distribution device further includes a control means for implementing prescribed control setting on said transmission line for said plurality of sets of identical encoded image data having prescribed time differences that are transmitted from said encoded image data transmission means (col. 44, lines 1-10, 25-40; col. 48, lines 57-59; col. 56, lines 24-28; col. 61, lines 42-49; col. 64, lines 22-26; col. 65, lines 20-27, e.g., This is to permit the receiver or transceiver to look into its stored memory U8' to determine and to be able to calculate the time offset of the first and second parallel information streams to reconstruct missing faded portions

Art Unit: 2617

of the message caused by atmospheric dropouts, interferences or other types of fades causing faded information parallel in one or the other of the parallel information streams); and

said control means performs said prescribed control setting such that during normal operation that excludes said prescribed interval, of said plurality of sets of identical encoded image data having prescribed time differences, at least a prescribed set of encoded image data is received with priority in said image data reception device (col. 44, lines 1-10, 25-40; col. 48, lines 57-59; col. 56, lines 24-28; col. 61, lines 42-49; col. 64, lines 22-26; col. 65, lines 20-27); and

sets said prescribed control such that during said prescribed intervals, said plurality of sets of identical encoded image data having prescribed time differences are both received in said image data reception device (col. 65, lines 52-58; col. 66, lines 15-22).

Regarding claims 69, 83, and 97, Campana discloses the image data communication system, the image data distribution device, and the image data communication method according to claims 65, 82, and 93 respectively above, wherein said prescribed control setting is routing priority control on said transmission line (col. 6, lines 35-37; col. 10, lines 39-48; col. 62, lines 65-67).

Regarding claims 70, 84, and 98, Campana discloses the image data communication system, the image data distribution device, and the image data communication method according to claims 69, 83, and 97 respectively above, wherein during said normal operation, said control means sets said routing priority that relates to, of said plurality of sets of identical encoded image data having prescribed time differences (col. 44, lines 1-10, 25-40; col. 48, lines 57-59; col. 56,

Art Unit: 2617

lines 24-28), said prescribed encoded image data higher than for other encoded image data (col. 67, lines 15-25); and

during said prescribed interval, both sets said routing priority that relates to said prescribed encoded image data lower than during said normal operation and sets said routing priority that relates to said other encoded image data higher than during said normal operation (col. 18, lines 9-16, 57-65; col. 24, lines 40-45; col. 56, lines 2-6).

Regarding claims 71, 85, and 99, Campana discloses the image data communication system, the image data distribution device, and the image data communication method according to claims 65, 82, and 93 respectively above, wherein said prescribed control setting is power control on a radio transmission line that is a portion of said transmission line (col. 19, lines 55-64; col. 23, lines 33-38; col. 91, lines 54-65, e.g., The receiver power control will be systematically and periodically turned on to sample the received channel for the presence of data information).

Regarding claims 72, 86, and 100, Campana discloses the image data communication system, the image data distribution device, and the image data communication method according to claims 71, 85, and 99 respectively above, wherein:

during said normal operation, said control means sets power on said radio transmission line that relates to, of said plurality of sets of identical encoded image data having prescribed time differences (Abstract; col. 24, lines 6-16, 48-51; col. 25, lines 10-15, e.g., the first and second encoded information streams modulate cycles of the subcarrier to produce first and second parallel information streams which are time offset by the time delay interval), said prescribed encoded image data higher than for other encoded image data (col. 18, lines 9-16, 57-

Art Unit: 2617

65; col. 24, lines 40-45; col. 56, lines 2-6), and during said prescribed interval, both sets power on said radio transmission line that relates to said prescribed encoded image data lower than during said normal operation (col. 18, lines 9-16, 57-65; col. 24, lines 40-45; col. 56, lines 2-6) and sets power on said radio transmission line that relates to said other encoded image data higher than during said normal operation (col. 67, lines 15-25).

Regarding claims 73, 87, and 101, Campana discloses the image data communication system, the image data distribution device, and the image data communication method according to claims 65, 82, and 93 respectively above, wherein said prescribed control setting is the bit rate of encoded image data that are transmitted on said transmission line (Fig. 13; col. 6, lines 22-33; col. 7, lines 19-24, e.g., The 1200 and 2400 baud data transmission rates have shortened the data bit time to approximately 800 and 400 microseconds respectively. This short time per bit produces a marked degradation in message receipt reliability for lengthy alphanumeric messages).

Regarding claims 74, 88, and 102, Campana discloses the image data communication system, the image data distribution device, and the image data communication method according to claims 73, 87, and 101 respectively above, wherein:

during said normal operation, said control means sets said bit rate that relates to, of said plurality of sets of identical encoded image data having prescribed time differences, said prescribed encoded image data higher than for other encoded image data (Fig. 1; Fig. 8; col. 39, lines 30-47; col. 41, lines 49-54); and

during said prescribed interval, both sets said bit rate that relates to said prescribed encoded image data lower than during said normal operation and sets said bit rate that relates to

Art Unit: 2617

said other encoded image data higher than during said normal operation (col. 18, lines 9-16, 57-65; col. 24, lines 40-45; col. 56, lines 2-6).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 66-68, 94-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campana in view of Umeda et al. (hereinafter "Umeda"; US Patent No. 5,920,817).

Regarding claims 66 and 94, Campana discloses the image data communication system and the image data communication method according to claims 65 and 93 respectively above, wherein:

said image data reception device further includes a control information processing means for determining the start and end of said handover based on a reception state of encoded image data in said encoded image data reception means (col. 44, lines 1-10, 25-40; col. 48, lines 57-59; col. 56, lines 24-28; col. 61, lines 42-49; col. 64, lines 22-26; col. 65, lines 20-27);

said control means implements said prescribed control setting with the interval from the reception of said start notification until the reception of said end notification as said prescribed interval (col. 65, lines 52-58; col. 66, lines 15-22).

Campana fails to specifically disclose control information processing means both transmits a start notification to said control means when said handover starts and transmits an

Art Unit: 2617

end notification to said control means after the passage of a prescribed time interval from the end of said handover.

However, Umeda discloses control information processing means both transmits a start notification to control means when said handover starts and transmits an end notification to said control means after the passage of a prescribed time interval from the end of handover (col. 5, lines 20-30; col. 10, lines 51-56; col. 11, line 41-46; col. 12, lines 54-64).

Therefore, taking teachings of Campana in combination of Umeda as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to control information processing means both transmits a start notification to control means when said handover starts and transmits an end notification to said control means after the passage of a prescribed time interval from the end of handover for advantages of enhancing power consumption and reducing cost required for the actual implementation of the system.

Regarding claims 67 and 95, Campana discloses the image data communication system and the image data communication method according to claims 65 and 93 respectively above, wherein:

said image data reception device further includes a control information processing means based on the reception state of encoded image data in said encoded image data reception means device (col. 44, lines 1-10, 25-40; col. 48, lines 57-59; col. 56, lines 24-28; col. 61, lines 42-49; col. 64, lines 22-26; col. 65, lines 20-27);

said control information processing means transmits to said control means a first request to alter said prescribed control setting, and transmits to said control means a second request to

Art Unit: 2617

alter said prescribed control setting after the passage of a prescribed time interval (col. 65, lines 52-58; col. 66, lines 15-22); and

said control means performs said prescribed control setting with the interval from the reception of said first request until the reception of said second request as said prescribed interval (col. 65, lines 52-58; col. 66, lines 15-22).

Campana fails to specifically disclose a control information processing means for determining the start of said handover, control setting at the start of said handover, and the end of said handover.

However, Umeda discloses a control information processing means for determining the start of said handover, control setting at the start of said handover, and control setting at the end of said handover (col. 5, lines 20-30; col. 10, lines 51-56; col. 11, line 41-46; col. 12, lines 54-64).

Therefore, taking teachings of Campana in combination of Umeda as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have a control information processing means for determining the start of said handover, control setting at the start of said handover, and control setting at the end of said handover for advantages of enhancing power consumption and reducing cost required for the actual implementation of the system.

Regarding claims 68 and 96, Campana discloses the image data communication system and the image data communication method according to claims 65 and 93 respectively above, wherein:

Art Unit: 2617

said image data reception device further includes a reception state report means for reporting the reception state of encoded image data in said encoded image data reception means to said image data distribution device at prescribed intervals (col. 44, lines 1-10, 25-40; col. 48, lines 57-59; col. 56, lines 24-28; col. 61, lines 42-49; col. 64, lines 22-26; col. 65, lines 20-27).

Campana fails to specifically disclose control means determines the start and end of said handover based on reports of the reception state from said reception state report means, and implements said prescribed control setting with an interval that includes said handover interval and an interval from said end until the passage of a prescribed time interval as said prescribed interval.

However, Umeda discloses control means determines the start and end of said handover based on reports of the reception state from said reception state report means, and implements said prescribed control setting with an interval that includes said handover interval and an interval from said end until the passage of a prescribed time interval as said prescribed interval (col. 5, lines 20-30; col. 10, lines 51-56; col. 11, line 41-46; col. 12, lines 54-64).

Therefore, taking teachings of Campana in combination of Umeda as a whole, it would have been obvious to one having ordinary skill in the art at the time of the invention by applicant to have a control means to determine the start and end of said handover based on reports of the reception state from said reception state report means, and implements said prescribed control setting with an interval that includes said handover interval and an interval from said end until the passage of a prescribed time interval as said prescribed interval for advantages of enhancing power consumption and reducing cost required for the actual implementation of the system.

Art Unit: 2617

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit
2617